Defence Communications Systems

LDS101 LAN DISTRIBUTION SYSTEM

Embracing best-of-breed commercial off-the-shelf (COTS) technology, the LAN Distribution System (LDS101) provides the Sentinel system with the capability to form Local Area System networks and to connect them to the Wide Area System.

The LDS101 is a managed Layer-2 Ethernet switch targeted for deployment within strategic or tactical 19" communication or server racks. The unit is rugged and compact, making it ideal for military use.

It exploits a robust COTS Ethernet switch to provide 10/100/1000Mbps Ethernet connections for IP data and Voice over IP (VoIP) devices, and up to 1Gbps fibre connections for interconnectivity. These user devices can be connected to a free port and will readily function without any pre-planning.

SUMMARY

The LDS101 provides:
- Converged voice and data
- Optical and copper connections
- High capacity, leading edge technology
- Self-organising, plug-and-play redundant topologies
- Support for network management.

An LDS101 can support, dependent on model, a number of Power over Ethernet (PoE) devices, such as Sentinel VoIP Phones and Terminal Adapters. This allows quick deployment and avoids the overhead of separate power distribution. Depending on the selected model, the LDS101 also provides non-powered ports for other devices, such as data terminals and servers.

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The LDS101 is intended to provide access to centralised services (including the Wide Area Network) and also to act as the bridge between one or more Local Area Networks. As a part of the Local Area Network, the LDS101 is self-organising and adapts to any routing topology (for redundancy and resilience). The LDS101, therefore, has the same versatility as the Sentinel Desk Access Unit (DAU) and can work alongside it.

Voice and data switching

The key benefits are:
- 10/100/1000Mbps fibre and copper ports
- Configured to support voice and data
- Auto-sense of data link rate and cable format
- SNMP management.

Implementation value for money

Best-of-breed COTS technologies:
- Inexpensive initial provision and update costs
- Low set-up costs, low user resource requirements
- Minimal training requirements
- Readily expandable system
- Wide range of port types and densities (current models provide 14 ports in a combination of copper and fibre).

FEATURES

- 1U rugged 19" rack-mount chassis
- Robust construction
- Support for both single and multimode fibre
- Hermaphrodite single or multimode fibre optic connectors
- Military connectors
- Fully non-blocking Ethernet switch
- Redundant link management
- Remote network monitoring (RMON) for traffic flow monitoring
- 802.1X support for network access control at the device level
- SNMP manageable (Versions 1 to 3)
- Supports QoS
- Equipment and link status indicators
- Covert Mode operation.

INTERFACES FOR THE SENTINEL LAN DISTRIBUTION SYSTEM

LDS101 Edition 0
- 12 x 10/100 Mbps copper ports (6 with PoE)
- 2 x 1Gbps fibre optic ports.

LDS101 Edition 1
- 8 x 10/100 Mbps copper ports (6 with PoE)
- 2 x 10/100/1000Mbps copper ports
- 2 x 1Gbps fibre optic ports
- 2 x 100Mbps fibre optic ports.

LDS101 Edition 2
- 8 x 10/100 Mbps copper ports (6 with PoE)
- 2 x 10/100/1000Mbps copper ports
- 4 x 100Mbps fibre optic ports.

LDS101 Edition 3
- 8 x 10/100 Mbps copper ports (6 with PoE)
- 2 x 10/100/1000Mbps copper ports
- 4 x 100Mbps fibre optic ports
- 3 x RS232/RS422/V34 serial ports.

Other LDS101 Editions can be supplied with other port configurations according to customer requirement.

Please contact us to discuss.

TECHNICAL SPECIFICATION

POWER SUPPLY	
Range	24V - 48V DC
Max consumption	40W (excluding power exported on PoE interfaces)
Max consumption	132W (exporting PoE)

PHYSICAL	
Size	43.5 x 438 x 450mm (H x W x D)
	19" 1U rack mountable
Weight	7kg

CLIMATE/ENVIRONMENT	
Temperature	
Storage	-55°C to +70°C
Operating	-40°C to +55°C
Humidity	0% - 95% RH non-condensing

EMC	
Mil Std 461 F	